Hot Springs National Park, Bathhouse Row: Quapaw Bathhouse: Mechanical & Piping Systems One mile North of US Highway 70 on State Highway 7 Hot Springs National Park Garland County Arkansas

HAER ARK, 26-HOSP, 3-E-

HAER NO. AR-4-E

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record National Park Service P.O. Box 37127 Wahsington, D.C. 20013-7127

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HISTORIC AMERICAN ENGINEERING RECORD

HOT SPRINCS NATIONAL PARK, BATHHOUSE ROW: QUAPAW BATHHOUSE: MECHANICAL AND PIPINC SYSTEMS

HAER NO. AR-4-E

Location:

Hot Springs National Park, Garland County, Arkansas. One mile north of US Highway 70 on State Highway 7 (Central Avenue).

Date of Construction:

1922

Present Owner:

National Park Service

Present Use:

Presently vacant.

Significance:

The Quapaw Bathhouse is part of Bathhouse Row, which represents a typical American Spa. The spring piping, heating and ventilation systems are examples of early twentieth century state-of-the-art

technology.

Historian:

Diana Prideaux-Brune

August 1987

[See HAER No. AR-4 for an overview history of Bathhouse Row.]

[See HABS No. AR-28 (A through I) for documentation of the architectural features of the bathhouses on Bathhouse Row.]

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The Quapaw heating system was similar to the systems in the Buckstaff and Hale Bathhouses. Air was brought through tempering coils by a Sirocco #6 blower and forced through heating coils and a by-pass. Automatic mixing dampers at the base of each zone duct were regulated by pneumatic thermostats and draft regulators. The original regulators have been replaced by electric damper controls. Floor radiators augmented the forced-air system.

A small air compressor with two-horsepower motor, disconnected, is extant in a basement storage room. The unit appears to be the only remaining compressor for the original pneumatic control system.

The later addition of a number of unit fans and air conditioners indicate some problem with ventilation and temperature regulation, particularly in the highly glazed areas on the west side of the building.

MECHANICAL EQUIPMENT INVENTORY

BOILERS:

Two 7-foot diameter tube-in-shell boilers supply steam to a combination forced-air and direct radiant heating system.

Walsh and Weidner
Minneapolis-Honeywell Regulator Co.
boiler water control

CONDENSATE RETURN:

A vacuum system is used to return condensate from the heating coils and radiators to the boiler. Pressure and water levels monitored by valves.

Skidmore Corp, St. Joseph, MI

Serial #: C43292

Patents: 1,390,390; 1,390,391; 1,441,036; 1,503,965; 1,657,555

EDR 15000

BLOWER:

The blower chamber and plenum are constructed of sheet metal on a concrete foundation. Blower of squirrel-cage type, 32-inch diameter. First patent: 1900. Tempered and heated air is directed by sheet-metal dividers within the blower chamber and plenum. The blower forces heated air to the various zones of the building.

Sirocco

American Blower Corp.

TEMPERATURE CONTROL:

Original damper controls have been replaced.

Minneapolis-Honeywell Regulator Co.

Transformer type automatic damper control Q72A1K1

Thermostats:

Minneapolis-Honeywell Regulator Co.

RADIATORS:

Radiators with two pipes for condensate return and steam supply are used.

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LAUNDRY:

Washing Machines

Pellerin Milnor

Hammond Laundry Cleaning Machine Co., Waco, TX 12 HP, 60 cycle, single phase, 110 volts

Serial #: 580 Model #: D2C

Dryers:

Cissell Permapress

Spinners:

drum spinners (no markings)

Iron:

Westinghouse induction motor

2 HP

Reeves Pulley Co., Columbus, IN

McKee Series 'C' automatic temperature control valve

Eclipse Fuel Engineering Co.

Catalogue #: 1120CR Patent #: 1752534

Zastrow Machine CO. Retort Sterilizer

Compressor Motor:

A small electric motor and compressor are stored in the basement. These units presumably are part of the pneumatic temperature control system.

Ceneral Electric AC Motor 2 HP

THERMAL WATER FLOW METER: Hays-Cochrane flow meter

[See HAER No. AR-4 for bibliography.]